

1937



Camborne-Redruth Urban District Council.

FOURTH ANNUAL REPORT

for the twelve months ending

DECEMBER 31, 1937,

by

C. RIVERS, M.A., M.D., M.R.C.P., B.Sc.

(Medical Officer of Health).

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MAP.

The Camborne-Redruth Urban District Council.

Medical Officer's Report

for the year ending 31st December, 1937.

FOLLOWING the usual practice the present report is cast in the form prescribed by the Minister of Health, which varies but little from year to year. When it has been possible to do so, comparative figures have been given for the previous year (1936) as well as for the year under review (1937).

A somewhat fuller account than usual has been given of the chief Industries of the area. A record of these Industries and of the approximate number of persons employed in them may prove of use not only at the present time but for purposes of comparison and reference in later years.

The Minister of Health having drawn attention to the necessity of frequent analysis of our water supply, and there being other cogent reasons why we should have a record, readily available for reference, of the whole of the water supply of the area, a special survey has been made and the source and origin of all the water supply of the area and its distribution has been carefully studied. This survey includes likewise the localisation of all public wells and pumps in the area. The subject has been fully illustrated upon an ordnance survey map which is included in the report. I wish to acknowledge my indebtedness to our Water Engineer, Mr. T. F. King, M.Inst. M. & Cy.E., for his willing and able assistance in the preparation of this map.

Also I wish to thank our Sanitary Inspectors, Mr. Taphouse and Mr. Nairn, for their helpful co-operation throughout the year.

SECTION A. Statistics and social conditions of the area.

STATISTICS.

Area	.....	.....	.....	.....	.....	.....	22,411 acres.
Population.							1937 1936
Registrar General's estimation of the resident population (mid. 1937).	.....	.....	.....	.....	.....	35,100	35,270
Density of population (per acre).	.....	.....	.....	.....	.....	1.5	1.6
Population approximately estimated in round figures :—							
Camborne	.....	.....	.....	.....	.....	14,000	
Redruth	.....	.....	.....	.....	.....	11,000	
Remainder of the area	.....	.....	.....	.....	.....	10,000	
Inhabited Houses.							1937. 1936.
Number of inhabited houses according to the Rate Books (end of 1937).	.....	.....	.....	.....	.....	10,853	10,770
Rateable value	.....	.....	.....	.....	.....	£120,700	£119,416
Sum represented by 1d. rate	.....	.....	.....	.....	.....	£437	£425
Number of inhabited houses :—						1937.	1936.
Camborne	.....	.....	.....	.....	.....	4,248	4,221
Redruth	.....	.....	.....	.....	.....	2,855	2,845
Illogan	.....	.....	.....	.....	.....	2,406	2,368
St. Day and Lanner	.....	.....	.....	.....	.....	1,344	1,336
Total	.....	.....	.....	.....	.....	10,853	10,770

SOCIAL CONDITIONS AND CHIEF INDUSTRIES.

Mining Engineering,	Agriculture,
Tin Mining,	Poultry Farming,
Tin Streaming,	Bacon Making.
Rock Drill Making,	
Safety Fuse Making,	

A description is here given of some of the more important industries of the area.

TOOL MAKING.

This is one of the most important industries in the area.

HOLMAN BROS., LTD.

This firm was founded in 1801 and remains to-day under the control of the four great grandsons of its founder. The firm employs at their works and offices at Camborne, approximately 1,100 employees.

There are therefore employed in the tool making industry of the area a larger number of men than are employed in the local mines.

In Holmans' Works are four chief departments :

No. 1 Works. Wesley Street, including an Iron Foundry. Here are produced :—

- Air Compressors.
- Compressed Air Engines and Motors.
- Hoists, Haulages, Winders.
- Scraper Loading Equipment.
- Ore concentrating Tables.

SECTION A—continued.

No. 2 Works. Trevenson Street. Here are produced :—

Pneumatic tools, including Rippers, Picks, Spades, Rammers, Hammers, Riveters, Vibrators, Driller (for metal) Grinders.

No. 3 Works. Station Road.

(including an extensive Heat Treatment Plant).

All Types of Rock Drills.

Rock Drill accessories.

Drap Forging Works. ((*Cornish Boiler Co*), North Roskear.

Produce :—Steel Forgings for machines manufactured in the other three branches.

The Firm has also :—

(a) **The Testing Quarry**, at Carwynnen, just within the Camborne-Redruth area. Here every completed Rock Drill is tested before despatch, and actual underground conditions are reproduced.

(b). Experimental Quarry at Penponds where models of Rock Drills and improvements are thoroughly tested in the exceptionally hard rock.

The products of Holman Bros. Works in Camborne are well known and are used in almost every country where minerals are mined.

THE CLIMAX ROCK DRILL AND ENGINEERING WORKS LTD.

This Company, after specialising for many years in all classes of rock drilling machinery and pneumatic tools, is now extending the range of its products to include Air Compressors, Marine Gears and Electric Drills. The Company has also secured important contracts from Government Departments in connection with the National Defence programme. A year of great activity is reported and large extensions to the workshops are being carried out.

The number of persons employed by this firm is approximately 400.

IMPERIAL CHEMICAL INDUSTRIES LIMITED.

Several hundred persons are also engaged in the area by **Messrs. Bickford-Smith and Company, Limited**, a branch of Imperial Chemical Industries Limited.

TIN MINING.

There are two mines within the area, **East Pool Mine** and **South Crofty Mine**. These mines together usually employ between 600 and 700 men. During the year under consideration the number of men employed at the two mines was 705.

The yearly quantity of Black Tin raised from South Crofty and East Pool during the past six years and the average standard cash price per ton during these years is as follows :—

TIN raised in the area.						Standard cash price per ton.	
1932	.....	.....	.....	1221 tons	.....	.....	£136, 3/32
1933	.....	.....	.....	1209 „	.....	.....	£194, 26/32
1934	.....	.....	.....	1226 „	.....	.....	£230
1935	.....	.....	.....	1157 „	.....	.....	£225, 19/32
1936	.....	.....	.....	1197 „	.....	.....	£204, 19/32
1937	.....	.....	.....	1221 „	.....	.....	£243, 14/32

The competition produced by The World Production of Tin is more or less disastrous to our Cornish mines. The price of tin since the end of 1937 has dropped to £184 per ton in January and £183 in February 1938. This is the lowest figure recorded since 1932 and the effect upon our mines has been unfortunate. The East Pool and Agar Mine Company have discharged over 200 men, and this mine, which has been working more than 100 years, is threatened with closure. On the other hand, if the price of tin increases sufficiently in the near future, there is every possibility of the mine continuing to operate as before, closure is improbable.

SECTION A—continued.

South Crofty, as a Company, is more favourably placed in having also a Wolfram mine which is making a good profit, and in the possession of a substantial cash reserve.

No doubt the quantity of tin raised annually in the area is insignificant compared with the total world production. As the Minister for the Co-ordination of Defence is reported to have pertinently remarked, “one boat from Nigeria with 7,000 tons of tin would represent three years production from the whole of Cornwall” On the other hand the mines within our area are closely linked with the **Camborne School of Mines** which is an important training school for the production of skilled men. Mining Engineers who have graduated at this school are to be found employed in all parts of the Empire—and of the world. When the association of the local Mines with the Camborne School of Mines is properly understood it is apparent that any disaster to the mines would greatly limit the advantages now enjoyed by that School.

It is unfortunate that the recent deputation to the Ministry on behalf of the mines should not have included representatives of the Urban District Council.

Many miners residing within the area are employed in Cornish Mines—such as Mount Wellington—or Geevor Mines—outside the area.

Also there are not a few miners and Mining Engineers, normally resident within the area, employed in the mines of West and East Africa, India, Malay, Venezuela and in other parts of the world.

THE CORNWALL ELECTRIC POWER COMPANY, Carn Brea.

Since the passing of the Cornwall Electric Power Act 1936, the organisation of Cornwall's electricity supply has become more centralised. The premises of the Cornwall Electric Power Company at Carn Brea, comprise :—

The Central Office,
Stores,
Transport Department,
Cooking and Water Heating Department,
Construction Department.
Meter Department, and Maintenance Department.

These departments operate throughout Cornwall. The members of the Administrative and Clerical Staff number about 130 and, in addition, there are over 200 manual workers employed in the district in connection with the above named department.

AGRICULTURE.

The number of persons registered under the Agricultural Insurance Act—in the Camborne-Redruth area—is 771.

Men	.....	.....	.....	579
Boys	.....	.....	.....	168
Women	.....	.....	.....	12
Girls	.....	.....	.....	12
Total	.....	.....	.....	<u>771</u>

The number of persons registered as unemployed (at the time of writing) is 19, namely :—

Men	.....	.....	.....	16
Boys	.....	.....	.....	2
Women	.....	.....	.....	0
Girls	.....	.....	.....	1
Total	.....	.....	.....	<u>19</u>

BACON CURING.

This is a considerable industry in the area as is shown by the number of pigs slaughtered during the year. Complete figures are not available and probably will not be available until such time when we possess a public abattoir in the area.

We have however the reports from the two Bacon Curing Factories that are within the area, the West of England Bacon Company and the Cornish Meat and Provision Company. The figures for these two Companies are given below :—

The combined curing capacity of the two factories is—50,000 to 70,000 pigs annually.

	1937	1936
Number of pigs slaughtered	33,861	37,013
Yield of Bacon, (approx.)	37,800 cwt.	41,000 cwt.
Yield of Lard (approx.)	1,900 cwt.	2,228 cwt.

The number of pigs reported by these Factories as having been found infected with tuberculosis at the time of slaughter was approximately 17.25% in 1937, and 13.5% in 1936.

Attention is again directed to the usual practice, namely: when the head and neck only are by the naked eye examination seen to be infected with tuberculosis these parts only are destroyed, and the rest of the carcase is sold for food.

Such practice is permitted but it does not commend itself to us. In support of our objection we may again quote the recommendations of the Royal Commission on Tuberculosis 1888, which reports :—

*“ In view of the greater tendency to generalisation of tuberculosis in the pig, we consider
“ that the presence of tuberculosis deposit in any degree should involve seizure of the whole
“ carcase and of the organs.”*

In both these factories above named all the animals are slaughtered under humane and hygienic conditions. Whether the same may be said to be the case in all places within the area where pigs (and other animals) are slaughtered, is doubtful. With our present inadequate staff of Sanitary and Meat inspectors proper supervision is impossible. It is in the interest of all those who conduct their business under humane and hygienic conditions and who wish to preserve their good reputation, as it is likewise in the interest of the consuming public—to press for more adequate supervision, that is for additional inspectors.

The following comparison may be worthy of study :—

The figures are for the year ending Dec. 31, 1936 and refer to tuberculosis in pigs.

	No. pigs killed	Carcases surrendered	Heads surrendered	
Camborne—Redruth	40,000	47	235	Inspection by Sanitary Inspector
Shaftesbury Rural District	37,500	228	6420	Meat inspected by whole time Inspector.

THE CAMBORNE CREAMERY (*Milk Marketing Board*).

This Creamery, at Treswithian near Camborne, was opened on May 25th, 1937. It is a model creamery and worthy of a visit by those interested.

During the first 12 months of operation at this Creamery the total intake of milk was 1,500,000 gallons.

During this period the following processes were carried out :—

- (1) Raw Milk was collected from Farmers and received at the Creamery.
- (2) The Milk was weighed, tested, pre-heated and separated into cream and skim milk.
- (3) The skim milk was cooled, and returned to the Farmers.
- (4) The cream was pasteurised, cooled, chilled and manufactured into butter.

SECTION A—continued.

The Milk was tested and the laboratory results for seven months were :—

Number of samples tested for bacterial purity	.....	.....	.....	5,469
Number of samples tested for cleanliness	.....	.....	.....	4,072
Number of samples tested for fat, water etc.	.....	.....	.....	18,573
Number of samples tested for acidity	.....	.....	.....	7,163

UNEMPLOYMENT.

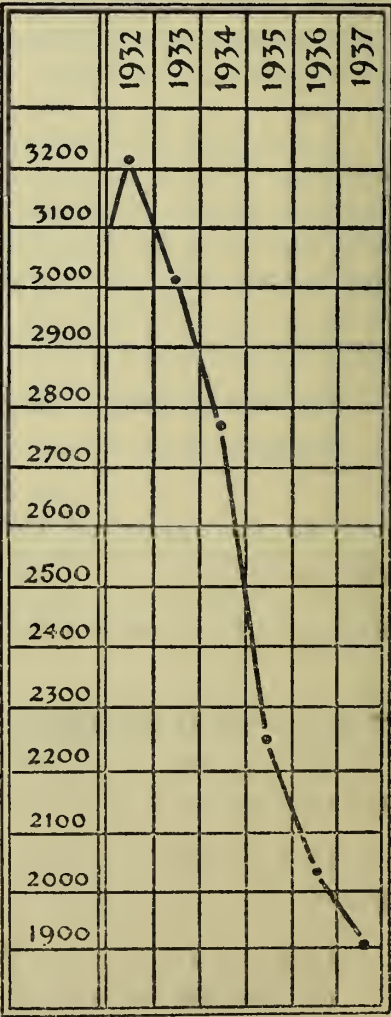
The number of persons registered at the Camborne and Redruth offices during the twelve months ending December, 31st, 1937 is shewn in the following table :—

1937.	Men of 18 and over.			Boys.	Women of 18 and over.			Girls.	Total.
January	1906	.....	27	.....	173	.....	32	2138
February	1833	.....	25	.....	156	.....	35	2049
March	1822	.....	32	.....	124	.....	20	1998
April	1758	.....	28	.....	105	.....	23	1914
May	1697	.....	33	.....	86	.....	20	1836
June	1505	.....	12	.....	89	.....	26	1632
July	1525	.....	13	.....	93	.....	26	1657
August	1588	.....	14	.....	103	.....	24	1729
September	1669	.....	18	.....	124	.....	26	1837
October	1765	.....	29	.....	126	.....	45	1965
November	1791	.....	30	.....	149	.....	38	2008
December	1892	.....	25	.....	141	.....	25	2083

The yearly average number of persons registered as unemployed from 1932 to 1937 is here shewn in column and also graphically :—

YEAR.	Average number registered as unemployed.			
1932	3,209
1933	3,011
1934	2,766
1935	2,244
1936	2,039
1937	1,904

Yearly average number of persons registered as unemployed.



UNEMPLOYMENT AND INDUSTRIES.

The industries shewing the greatest number of persons registered as unemployed are as in the previous year, namely:

MEN.

- Works of construction
- Tin Mining
- Building (mostly unskilled workers)
- Distributive Trades
- Stone Quarrying
- Transport (relatively few)
- Concrete Block Making

WOMEN.

- Distributive Trades
- Hotel Service (in Winter)
- Tailoring

Boys.

- Distributive Trades

Ex-SERVICE MEN.

The average number of disabled service-men registered as unemployed was 17.

Horizontal lines shew the year.
Vertical lines shew the number of unemployed persons.

SECTION A—continued.

Unemployment Percentage.

Average number of unemployed persons for the year. The figures are percentages of Insured Workers.

	CAMBORNE-REDRUTH.				GREAT BRITAIN.			
1930	—	16.1%
1931	36%	.....	.....	.....	21.5
1932	37	.....	.....	.....	22.1
1933	35	.....	.....	.....	19.9
1934	31	.....	.....	.....	16.7
1935	25	.....	.....	.....	15.5
1936	24	.....	.....	.....	13.2
1937	19.3	.....	.....	.....	10.9

POOR LAW RELIEF.

The approximate amount of relief granted in the Camborne-Redruth area (and part of Hayle) :—

	1937	1936	1935
Relief in kind	£ 1,742	£ 1,853	£ 1,668
Relief in Cash	£19,103	£20,172	£20,775
Total relief	£20,845	£22,025	£22,443

VITAL STATISTICS.**Live Births.**

	Males	Females	Total 1937	Total 1936
Legitimate	243	220	463	454
Illegitimate	14	10	24	29
Total Live Births	257	230	487	483

Birth Rate. Births per 1,000 of the estimated population.

YEAR	1937	1936	1935
BIRTH RATE	13.87	13.69	13.3

Still Births.

	Males	Females	Total 1937	Total 1936
Legitimate	8	10	18	15
Illegitimate	1	—	1	—
Total Still Births	9	10	19	15
Rate per 1,000 total (live and still) births	.....	.....	.....	30

Deaths from all causes.

Males	Females	Total 1937	Total 1936
253	327	580	520

Death Rate. Deaths per 1,000 of the estimated resident population (corrected).

Year	1937	1936	1935
Rate	16.51	14.74	14.8

SECTION A—continued.

Comparative Birth and Death Rates for the year 1937.

Birth Rates	Camborne Redruth	England & Wales	148 Smaller Towns of pop. 25,000-50,000	London admin. County.
Live	13.87	14.90	15.30	13.30
Still	0.54	0.67	0.64	0.54
Death Rates	16.51	12.50	11.90	12.30

(These are rates per 1,000 resident population.)

The Camborne-Redruth Birth-Rate remains lower than that of England and Wales (13.87 to 14.90) and the death Rate higher (16.51 to 12.50).

The cause of the disparity between the local death-rate and the death-rate of England and Wales is to be found, no doubt, in the fact that in this area (as in Cornwall as a whole), there is a large percentage of very old people.

This again is attributable to the emigration from the area of many young adults who seek employment elsewhere in England or abroad.

Number of persons who attained old age.

Age at death	.....	.....	Males	Females	Total for 1937	Total for 1936
70—74 years	.....	.....	42	53	95	57
75—79 years	.....	.....	21	43	64	75
80—84 years	.....	.....	20	41	61	52
85—89 years	.....	.....	8	29	37	27
90—94 years	.....	.....	4	14	18	14
95—99 years	.....	.....	0	1	1	5
100 years	.....	.....	0	0	0	0
			95	181	276	230

The total number of persons who attained the age of 70 years or more was 276, that is 475.9 per 1,000 deaths. In other words about one half of the number of persons that died during the year had attained the age of 70 years or over.

Almost twice as many females attained old age as males.

Decrease of Population.

The excess of the number of deaths over the number of births was
for 1937 — 93, a decrease rate of 2.64 per 1,000 population.
for 1936 — 37, a decrease rate of 1.05 per 1,000 population.

Deaths from Puerperal Causes per 1,000 Total Births (Live and still). (*Maternal Mortality*)

	Deaths	Camborne—Redruth Rate per 1,000 Total births	England and Wales. Rate per 1,000 Total births
Puerperal Septis	1	1.97	0.97
Other Puerperal Causes	0	0.00	2.26
Total	1	1.97	3.23

Deaths of Infants under one year of age.

	Males	Females	Total for 1937	Total for 1936
Legitimate	18	10	28	23
Illegitimate	1	0	1	1
Total	19	10	29	24

SECTION A—continued.

Death Rate of Infants under one year of age.	1937	1936	England & Wales 1937
All infants per 1,000 live births	59.5	49.6	58
Legitimate infants per 1,000 legitimate live births	60.4	—	—
Illegitimate infants per 1,000 illegitimate live births	41.6	—	—

The death rate of infants under one year of age has increased from 49.6 to 59.5 per 1,000 live births and is now slightly above that for England and Wales, whereas in 1936 it was below that rate.

Causes of Death in Infants under one year of age. (*including congenital causes*).

Premature birth	9
Congenital Debility	5
Pneumonia	3
Congenital Heart Disease	3
Convulsions (Birth injuries)	3
Enteritis	2
Spina Bifida	1
Anencephaly	1
Tuberculous Meningitis	1
Accident	1
Total	29

The Principal Causes of Death in the District in 1937 were as follows :—

	Males.	Females.	Total.
Heart Disease	61	84	145
Cancer	28	54	82
Old Age	14	44	58
Pulmonary Tuberculosis	20	11	31
Other forms of Tuberculosis	3	1	4
Puerperal Sepsis	0	1	1
Other Puerperal Diseases	0	0	0
Congenital Debility }	14	6	20
Premature Birth }			
Diarrhoea under 2 years	0	2	2
Diarrhoea 2 years and over	0	0	0

INFECTIOUS DISEASES.

Typhoid Fever.....	1	1	2
Measles	1	0	1
Scarlet Fever	1	0	1
Whooping Cough	0	0	0
Diphtheria	0	0	0
Influenza	7	8	15
Encephalitis Lethargica	0	0	0
Cerebrospinal Fever	2	0	2
Nephritis (acute and chronic)	16	11	27
Cerebral Haemorrhage	7	19	26
Other Circulatory Diseases	7	11	18
Bronchitis	6	10	16
Pneumonia	4	7	11
Other Respiratory Diseases	13	2	15

(Continued on next page).

SECTION A—continued.

<i>The Principal Causes of Death—continued.</i>								Males.	Females.	Total.
Diabetes	.....	.....	.....	.....	.....	.....	.....	1	8	9
Diseases of the Liver	.....	.....	.....	.....	.....	.....	.....	3	3	6
Appendicitis	.....	.....	.....	.....	.....	.....	.....	1	3	4
Peptic Ulcer	.....	.....	.....	.....	.....	.....	.....	1	0	1
Other Digestive Diseases	.....	.....	.....	.....	.....	.....	.....	4	4	8
Syphilis	.....	.....	.....	.....	.....	.....	.....	0	1	1
Suicide	.....	.....	.....	.....	.....	.....	.....	5	3	8
Other Acts of Violence	.....	.....	.....	.....	.....	.....	.....	16	10	26
Other defined diseases	.....	.....	.....	.....	.....	.....	.....	17	23	40
Total	.....	.....	.....	.....	.....	.....	.....	253	327	580

SILICOSIS. (Incapacity claims and death claims).

Cases arising in Cornwall.

The number of Compensation claims examined by the Silicosis Medical Board in Cornwall and coming in our purview was in :—

1935	.....	.....	.....	.....	19
1936	.....	.....	.....	.....	27
1937	.....	.....	.....	.....	29

Thirteen of these claims in the year 1937 were in respect of men residing in the Camborne-Redruth area.

The findings of the Medical Board are given below :—

Compensation claims in respect of men residing within the area.

Disablement not due to Silicosis	.....	.....	.....	.....	.....	4
Partial Disablement due to Silicosis	.....	.....	.....	.....	.....	3
Total Disablement due to Silicosis	.....	.....	.....	.....	.....	2
Death not caused by Silicosis	.....	.....	.....	.....	.....	1
Death caused by Silicosis	.....	.....	.....	.....	.....	3
Total	.....	.....	.....	.....	.....	13

Deaths from Silicosis.

There were 11 deaths where Silicosis was certified to be either the primary cause or a contributory cause. As usual the majority of these deaths occurred in persons between the ages of 40 and 50 years.

Ages at death. (Silicosis).

	1937	1936	1935
Under 30 years	1	1	1
40-50 years	4	4	10
50-60 years	2	3	8
60-70 years	1	1	1
70-80 years	3	0	1
	11	9	21

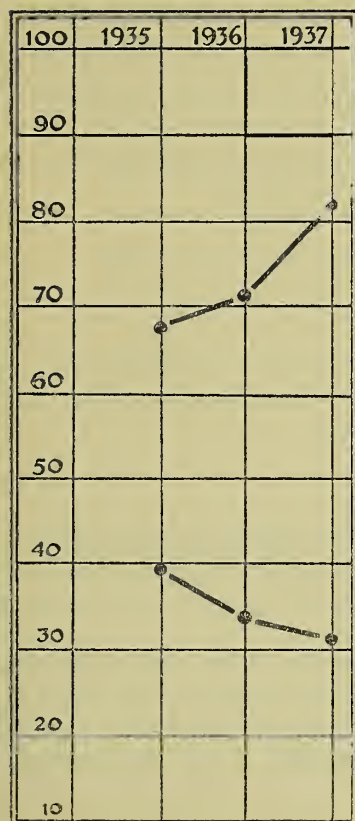
Excessive Mortality or unusual Sickness.

No excessive mortality nor unusual sickness is to be recorded for the year.

Cancer and Tuberculosis.

There were 82 deaths from Cancer and 31 from Pulmonary Tuberculosis. This represents for Cancer a rate of 141.3 per 1,000 deaths from all causes. For Pulmonary Tuberculosis, a rate of 53.4 per 1,000 deaths from all causes.

SECTION A—continued.



The rise of Cancer and
Fall of Pulmonary Tuberculosis.

Ages at Death. (Cancer).

Age.	Males.	Females.
0-30 years	0	0
30 and over	1	0
40 and over	1	11
50 and over	8	5
60 and over	7	15
70 and over	8	17
80 and over	2	6
90 and over	1	0
Total	28	54

The rise of Cancer and the fall of Pulmonary Tuberculosis.

The Cancer death rate per 1,000 of the population in the District was for :—

1935	1.8
1936	2.0
1937	2.3

As in previous years it is observed that Cancer occurs approximately twice as frequently in women as in men, and the majority of deaths from this cause occurs in persons over the age of 60 years.

Deaths and Injuries on the Roads.

On the roads in the Camborne-Redruth area during the year 1937, as the result of motor accidents, there were :—

Killed	3 persons.
Injured	143 persons.

Rate per thousand of the population in the district :—

Killed	0.08 per 1,000.
Injured	4.07 per 1,000.

During the same period, on the roads of Great Britain there were :—

Killed	6,633 persons.
Injured	266,408 persons.

Rate per thousand of the population of Great Britain :—

Killed	0.147 per 1,000
Injured	5.94 per 1,000.

Measurements taken to prevent ill effects from Unemployment :—

Payment of unemployment benefit.

Social Service Schemes in both Camborne and Redruth.

The Camborne Social Service Centre. This centre was opened in November by the Lord Lieutenant, Colonel Edward Bolitho. On December 1st the centre was honoured by a visit from His Majesty the King, who showed great interest in the work being done there. Good work was done in the boot repairing shop, 247 pairs being repaired during the year. A handicraft club has been started. Several hand woven scarves and some rugs have been made.

There are 48 allotment holders.

The Mid and West Cornwall Local Employment Committee.

SECTION A—continued.

The John Davey Charity. The Capital of this Charity is £56,800. During the year ending June 30th, 1937 the sum of £1,661 was distributed among approximately 150 recipients. The charity is administered by a body of Trustees including the vicars of St. Day and Lanner and the Methodist Ministers in charge of the Churches in St. Day and Lanner Moor. The recipient must be a miner resident in the Ancient Parish of Gwennap, and over 70 years of age or disabled, or a widow. The cost of administrating the Charity is very small, about £25 a year or 1½% of the income.

Playing Fields.

There are in all thirteen playing fields in the area.

The Mill's Trust.

A festival is held annually at St. Day and Carharrack when each child receives one shilling and old folks are entertained to tea. They also receive a parcel at Christmas.

Milk in Schools Scheme.

Under this scheme the Cornwall Education Committee have made provision for school children to obtain free milk when their parents are unable to pay for it. Milk is supplied to them at one half-penny for a one-third pint whether it is paid for by the Education Committee or by the child's parent.

The scheme naturally maintains its popularity and the general opinion of the teachers is that children benefit considerably from the daily milk ration, particularly those provided with free milk and those who shewed some signs of subnormal nutrition. The figures given below shew a steady increase in the number of recipients of free milk. The total number of children in the Authority's area who take the daily milk ration remains at a fairly constant level.

The Committee insists upon the following conditions :—

- (i). The milk must be consumed in school, during the morning session. The parents' consent must be obtained. The children are not allowed to take the milk home.
- (ii). The normal daily supply per child is one-third pint in a bottle, but an additional one-third pint may be provided in the afternoons for specially selected (e.g. malnourished) children.
- (iii). The County Medical Officer (who is also School Medical Officer), must, in consultation with the local Medical Officer of Health, approve of the source and quality of the milk.

Approved dairymen receive a subsidy from the Milk Marketing Board, on production of records of daily milk consumption, on forms provided by that Board and signed by the Head Teacher. The necessary bottles and straws are provided by the Dairymen.

Necessitous malnourished children, selected by the School Medical Officer, who cannot assimilate milk, may be provided with cod liver oil.

The number of children in the Public Elementary Schools of the District that received milk in schools is shewn below.

Quarter Ending	Number of Pupils.			
	Paying Pupils.		Non-Paying Pupils.	
	1937	1936	1937	1936
March 31st	2048	1914	748	390
June 30th	1967	1777	793	484
September 30th	2006	1702	803	578
December 31st.	1987	2099	808	653
Total	8008	7492	3152	2105

Camborne Milk Fund.

This private milk fund which hitherto has been administered by Mrs. Blackwood to whom we are much indebted, is now taken over by the Camborne Welfare Centre. Milk from this source is given to children under five years of age. 75% of the money expended is furnished by the Cornwall County Council. Fifty-five infants were supplied with milk through this fund during the year.

SECTION A—continued.

CEMETERIES.

The four cemeteries under the jurisdiction of the Council cover an area of eight and a half acres.

The Redruth Cemetery, opened in 1880	extent 4 acres.
Treslothan Cemetery opened in 1885	extent 1½ acres.
The Camborne Cemetery opened in 1889	extent 1½ acres.
The Illogan Cemetery opened in 1928	extent 1½ acres.

The number of interments in these cemeteries was during :—

1935	.....	.....	.....	.....	198
1936	.....	.....	.....	.....	198
1937	.....	.....	.....	.....	213

Interments during 1937.

				Resident.			Non-Resident			Total.
				Males.	Females.	Children.	Males.	Females.	Children.	
Camborne	.....	.....	.....	22	16	5	0	0	0	43
Redruth	.....	.....	.....	34	49	14	4	3	2	106
Illogan	.....	.....	.....	12	12	3	0	1	0	28
Treslothan	.....	.....	.....	6	22	6	1	1	0	36
Total	.....	.....	.....	74	99	28	5	5	2	213

The average number of burials during the last ten years is for :—

Camborne	.....	.....	.....	32
Redruth	.....	.....	.....	98
Illogan	.....	.....	.....	24
Treslothan	.....	.....	.....	36
				190

The average grave spaces purchased per annum in perpetuity :—

Camborne	.....	.....	.....	4
Redruth	.....	.....	.....	24
Illogan	.....	.....	.....	7
Treslothan	.....	.....	.....	6
				41

All the cemeteries are exceedingly well kept, because of the care of friends and the efficient administration of the department.

Proposed Site for New Burial Ground.

A site has been selected adjoining the main road from Redruth (Trewirgie Road), to Helston about three quarters of a mile distance from Redruth, in the field marked 2544, 2547 and 2548 upon the Ordnance Maps. 4.010 acres.

In the opinion of the Medical Officer of Health the site fulfils the requirements usually considered essential for a burial ground, in regard to orientation, nature and depth of soil and freedom from risk of contaminating water supplies. On asthetic grounds however there are some objections to the site.

The site has since received the approval of the Ministry for purchase.

SECTION B. General Provision of Health Services for the Area.

Public Health Officers of the Authority.

Medical.

There is one Medical Officer of Health and one Assistant Medical Officer of Health (both part time officers).

Charles Rivers, M.A., M.D., B.C., (Camb.), M.R.C.S. (Eng.), B.Sc., M.R.C.P. (Lond.). Medical Officer of Health.

William Blackwood, D.S.O., M.B., Ch.B. (Edin.), Assistant Medical Officer of Health.

Sanitary.

There are two whole time Sanitary Inspectors, who are also meat and food inspectors.

H. Taphouse (Inspector for the Western area, including Camborne).

Certificate of the Royal Sanitary Institute as Sanitary Inspector and as Inspector of meat and other foods. Certificate in Building Construction.

M. Nairn (Inspector for the Eastern area, including Redruth).

Certificate of the Royal Sanitary Institute as Sanitary Inspector and as Inspector of meat and other foods.

Surveyor and Waterworks Engineer.

T. F. King, M.Inst., M. & Cy.E.

Shops Acts Inspector.

W. I. Whitburn.

Housing Officer.

W. Hawke.

Inadequacy of the Sanitary Inspectors' Staff.

The understaffing of the Sanitary Inspectors' department, so strongly emphasised on previous occasions remains as it was. The urgency of this matter is not realised, notwithstanding all that has been written and said.

Nursing.

No Health Visitor, Midwife or Special Nurse is regularly employed by the Council. (see below, under "Nursing in the Home"). Trained nurses for service in the Isolation Hospitals of the area are engaged as they are required.

The difficulty of adequately providing an efficient nursing staff, which is felt in almost every hospital throughout the country, is also felt in the West Cornwall Miners' and Women's Hospital, Redruth, which serves the purpose of a General Hospital within the area. This hospital will soon fulfil the requirements of a recognised training school for nurses, when the difficulty will be much reduced.

Laboratory Facilities.

The Redruth Clinical Laboratory carries out the pathological work and water analysis for the Council as also for the West Cornwall Miners' and Women's Hospital, Redruth. 1,147 specimens were examined in the Laboratory during the year. The Laboratory was first opened in 1917 and is on the list of Laboratories approved by the Council of the British Medical Association.

Ambulance Facilities.

The St. John Ambulance Brigade is under the immediate direction of Lt. Col. W. W. Blackwood, D.S.O., M.B., Ch.B., Officer of the Order.

SECTION B—continued.

There are three divisions of the Brigade in the area (No. 9 District).

- (1). **The Redruth Division.** Divisional Surgeon, Dr. Macdonald ; Officer in charge, C. C. Pellowe.

Numerical strength at 31st December 1937—52.

Divisional Surgeon	.....	1
Divisional Superintendent	.....	1
Other Officers	.....	2
Sergeants	.....	3
Corporals	.....	4
Privates	.....	41
Total	.....	52

First Aid cases attended	.....	2222
Number of patients removed	.....	673
Mileage	.....	4395
Number of road accidents attended	.....	30
Mileage incurred in removing road accidents	.....	147
Number of First Aid posts	.....	4

Air Raid Precautions (A.R.P.).

Number of Rank and File certificates issued—4 (Grade 3).

- (2). **The Camborne Division.** Divisional Surgeon, Dr. Blackwood ; Officer in charge, W. E. Butler.

Numerical strength at 31st December, 1937—28.

Divisional Surgeon	.....	1
Divisional Superintendent	.....	1
Other Officers	.....	1
Sergeants	.....	1
Corporals	.....	1
Privates	.....	23
Total	.....	28

First Aid cases attended	.....	262
Number of patients removed	.....	234
Mileage	.....	2299
Number of Road accidents attended	.....	8
Mileage incurred in removing Road accidents	.....	77
Number of First Aid Posts	.....	2

Air Raid Precautions (A.R.P.).

Number of Grade 1 Instructors 1.
Number of Grade 2 Instructors 2.

- (3). **The Illogan Division.** Divisional Surgeon, Dr. Pollok ; Officer in charge, R. Jory.

Numerical strength at 31st December, 1937—26.

Divisional Surgeon	.....	1
Divisional Superintendent	.....	1
Other Officers	.....	1
Sergeants	.....	1
Corporals	.....	3
Privates	.....	19
Total	.....	26

First Aid Cases Attended	.....	1002
Number of Patients removed	.....	193
Mileage	.....	2079
Number of Road Accidents attended	.....	20
Mileage incurred in removing Road accidents	.....	125
Number of Beach Huts	.....	1

Air Raid Precautions (A.R.P.).

Number of Grade 2 Instructors 1
Number of Rank and File certificates issued 7

SECTION B—continued.

Summary of Ambulance Work.

	Camborne Division	Redruth Division	Illogan Division	1937	Totals 1936	1935
Number of patients removed by ambulance	234	673	193	1100	953	861
Road accidents in addition to above	8	30	20	58	48	58
Total mileage	2376	4542	2204	9122	8857	8683

The new Ambulance Headquarters for the Redruth Division were not completed at the end of the year. They have since been opened ; the subject will be commented upon in our next Report.

Ambulance service at Messrs Holman Bros. Manufacturers of Mining Machinery, Camborne. This firm provides ambulance rooms at their works in charge of competent men. They are provided with all necessary dressings, disinfectants etc. Serious accidents rarely occur in the factory, but all injuries receive immediate attention, however slight they may be.

Ambulance Conveyances.

For non-infectious cases.

There are three motor ambulances, one each at Camborne, Redruth and Pool, and belonging to its respective division (above described) of the St. John Ambulance Brigade.

For Infectious Cases.

There are two horse ambulances, one each in the Eastern and the Western ward of the area. They are available upon the order of the Medical Officer of Health or Sanitary Inspector.

Nursing in the Home.

There are seven **District Nursing Associations** in the area, all of them affiliated with the County Nursing Association and working under the direction of that Association. These associations depend for their support almost entirely upon voluntary contributions. They are as follow :—

The Camborne Nursing Association employs three nurses, all qualified S.C.M. (State Certified Mid-wife) and able to take Maternity work. Hon Sec. : Miss M. Pratt, 52 Mount Pleasant Road, Camborne.

The Treslothan Nursing Association employs one nurse who does both general and maternity nursing. Hon. Sec. : Mrs. Bastian, Pendarvis Street, Troon.

The Redruth Nursing Association employs three nurses. Hon. Sec. : Mrs. Pascoe, Park Road, Redruth.

The Nursing Association of Gwennap and St. Day employs one nurse. Hon. Sec. : Miss Nicholls, Cedric House, St. Day.

The Lanner and Gwennap Nursing Association employs one nurse. Hon. Sec. : Mrs. Osborne, Bellevue, Lanner.

The North Illogan Nursing Association employs one nurse. : Hon. Sec. : Mr. Delbridge, Churchtown, Illogan.

The South Illogan Nursing Association employs one nurse. Hon. Sec. : Mr. Pascoe, Illogan Highway.

We remain of opinion that the district would be better served by one central Camborne-Redruth District Nurses Association, affiliated with the County Nursing Association, instead of by seven separate associations with their respective committees and secretaries.

There are nine **District Nurse-Midwives** in the area. In addition the County Council employs four maternity nurses for puerperal cases, for ophthalmia neonatorum cases and for special midwives' cases.

There is one Health Visitor who also undertakes the duties of **Infant Life Protection** (under Part I of the Children's Act, 1908, as amended by the Children and Young Persons Act, 1932).

SECTION B—continued.

Maternity and Child Welfare.

There are four Maternity and Child Welfare Clinics in the area.

Camborne at Treloarwarren Street. Hon. Sec.: Miss C. M. White. The Medical Officers attend weekly and a Dental Surgeon monthly.

Attendances in 1937 :— Children 2005.

Mothers 1758.

Redruth, at Clinton Passage. Hon. Sec.: Miss M. Meager, 1, Sparnon Hill, Redruth. The Centre is open every Wednesday afternoon, between 3 and 4 o'clock. The Medical Officer attends fortnightly.

Attendances in 1937 :— 1202.

Number of children attended 84.

St. Day. Hon. Sec.: Miss E. Nicholls, Cedric House, St. Day. The Clinic is open every Wednesday afternoon. The Medical Officer attends upon the second Wednesday in every month.

Attendances in 1937 :—337.

The Clinic was closed for part of the year owing to the prevalence of Measles.

Pool, at Church Road. Hon. Sec.: Mrs. M. Penberthy, 20, Church Road, Pool. The Clinic is open every Wednesday afternoon between the hours of 3 and 4 o'clock. The Medical Officer attends once a month.

Attendances for 1937 :—Children 1215.

Mothers 965.

Lectures are given at these Centres by the County Council Health Visitor. The Centres are well attended.

CLINICS.

Eye Clinic. This is a department of the West Cornwall Miners' and Women's Hospital, Redruth (q.v.) The Medical Officer attends once a week.

Orthopaedic Clinic, Camborne. The Medical Officer attends on the fourth Wednesday in the month. The orthopaedic sister attends every Wednesday. The Clinic is at the Mission Hall, Camborne.

Tuberculosis Clinic, Tuckingmill. The tuberculosis Officer attends for consultation every Tuesday morning.

Veneral Diseases Clinic, Tuckingmill. The Medical Officer attends twice a week for consultation and treatment.

With the exception of the Eye Clinic, all these Clinics are administered by the County Council.

Information concerning the hours of attendance at the Clinics may be obtained on application to the County Medical Officer, County Hall, Truro.

Puerperal Septicaemia. A bed is available at the Tuckingmill Clinic for the admission and treatment of a patient suffering from this disease.

Ophthalmia Neonatorum. A bed is likewise available, in emergency for the treatment of a patient suffering with this disease.

HOSPITALS.**The West Cornwall Miners' and Women's Hospital, Redruth.**

The Hospital is now being enlarged. It serves the purpose of a General Hospital in the area, for which it is well equipped.

As the result of the Survey of the Hospitals in Cornwall by the Ministry of Health with the British Hospitals Association it is suggested that the Royal Cornwall Infirmary, Truro, and the Hospital at Redruth should act jointly as central hospitals, each continuing to develop the departments in which it has already specialized. The West Cornwall Miners' and Women's Hospital, in such case, should develop as the maternity centre and as an outlying radiological centre linked to the National Radium Centre at Plymouth. In both hospitals would be treated general medical and surgical patients.

The work done at the Hospital in Redruth shows a steady growth. Thus :—

	1932	1933	1934	1935	1936	1937
Number of patients admitted	595	745	772	831	943	981
Number of " patient days in hospital "	9272	11005	11209	11266	12604	14056
Operations performed	433	579	580	649	750	758

The Maternity Ward of the Hospital is supported by the County Council. Abnormal and difficult cases only, are admitted. Unsuitable home conditions in an otherwise normal case are not accepted as grounds for admission.

Patients are received into this ward from any part of the County.

Number of patients admitted (including those for ante-natal examination only)	.....	.....	95
Number of babies born	.....	.....	70
Caesarian Sections	.....	.....	30
Total maternal deaths during the year	.....	.....	4
Number of infants died, (including still births—4).	.....	.....	11

Radiography Department.

	1935	1936	1937
Number of patients radiographed	572	565	710

The Department possesses a 10 K.V.A. mechanically rectified X-ray installation and also a small mobile ward set.

The radiographs have maintained a considerable degree of excellence.

Radiotherapy.**(i) X-ray therapy.** (Superficial and medium deep).

	1935	1936	1937
Number of patients treated	53	71	101
Number of sittings	174	251	502

(ii) Radium.

Preparations were in progress at the end of the year for the opening a of Radium-Centre in 1938.

This has since been accomplished, largely through the generosity of Mr. C. V. Thomas, C.A., who has contributed the sum of £750 for the purchase of radium.

(iii) Ultra-Violet Light.

	1935	1936	1937
Number of patients treated	9	46	57
Number of sittings	54	188	264

SECTION B—continued.

Ophthalmic Department.

Honorary Ophthalmic Surgeon, H. B. Owen, D.S.O., O.B.E., M.B., Ch.B. (Cam.).

The department was opened in 1933. There is a Session every Wednesday afternoon.

					1935	1936	1937
Number of attendances	.....	.....	.....	.....	433	403	305

Children's Department.

There is an excellent children's ward in the Hospital. The windows are glazed with Vita-Glass.

					1935	1936	1937
Number of patients admitted	.....	.....	.....	.....	111	157	112

The value of this department is not sufficiently realised by the general public, who would otherwise make greater use of it when occasion arose.

Hospital Savings Association. (West Cornwall Miners' and Women's Hospital Contributory Scheme).

Contributors pay 3d a week regularly.

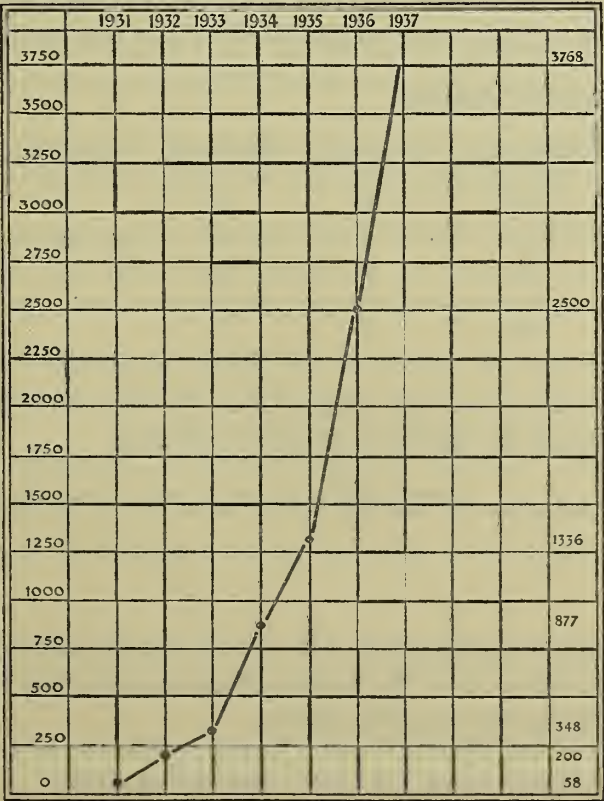
All persons are eligible as contributors provided their incomes are within certain specified limits ranging from £4 a week to £6 a week.

The chief privileges of contributors are that they and their dependants are relieved from any payment whether as in-patients in an ordinary ward or as out-patients of the hospital.

The scheme was started in this area in 1931 when there were 58 contributors. This number very soon grew as people came to realise its great value, so that in the year now under review there are more than 3,000 contributors in the area.

This rapid growth is graphically illustrated in the subjoined chart.

The growth in number of contributors in the area to THE HOSPITAL SAVINGS ASSOCIATION



Private Nursing Homes.

There are four Nursing Homes registered in the area namely :—

The Camborne Nursing Home (Miss G. A. Flintoff, Basset Road).

The Redruth Nursing Home (Mrs. I. R. Beringer, Green Lane).

Tremorvah Maternity Home (Miss E. Johns and Miss J. B. McLean, Redruth).

Indene Maternity Home (Miss V. Pearce, Redruth).

Prontosil and Sulphanilamide.

In a circular letter to Medical Practitioners in the County Dr. Clarke (County Medical Officer of Health) informed them that :

Enquiries are being received as to the free supply of these drugs, and in necessitous cases the expenditure incurred in supplying them will be refunded.

There is no Council Hospital in the area other than the Fever Hospitals but the Chairman and Vice-Chairman, for the time being, of the Urban District Council are ex-officio Vice-Presidents of the West Cornwall Miners' and Women's Hospital, Redruth.

FEVER HOSPITALS.

Three separate houses are used as Fever Hospitals in the area. These are at :—

Camborne—The Isolation Hospital off College Street.

Redruth—The East Tolgus Isolation Hospital.

Illogan—The West Tolgus Isolation Hospital.

The accommodation available in these Hospitals was discussed in the M.O.H. Report for 1935.

Upon the Ministry's scale of minimum floor space per bed the Hospitals can accommodate 16 beds only. In this space however we have placed 35 beds.

Sooner or later we hope these three buildings will be replaced by one central Isolation Hospital for which we possess an excellent site at West Tolgus. Then we shall no longer have to provide triplicate service including three separate caretakers, and then too we may hope to have a resident matron. The only present objection to such a change is the difficulty of meeting the necessary initial cost.

Admission to the Isolation Hospitals.

	Scarlet F.	Diphtheria.	Erysipelas.	Meningitis.	Enteric Fr.	1937	Totals. 1936	1935
Camborne	0	9*	0	0	1	10	23	1
Redruth	3	1	0	1	0	5	10	8
Illogan	7	0	0	0	0	7	58	22
Total	10	10	0	1	1	22	91	31

*Of these diphtheria cases seven were admitted from the West Penwith Rural District (Hayle). Average stay in Hospital of all the diphtheria patients was 50 days.

One patient with meningitis and one with scarlet fever died at the Redruth Isolation Hospital during the year.

Small Pox.

There is no Special Small Pox Hospital in the area. Should a case of Small Pox arise the patient would immediately be moved to one of the Isolation Hospitals in the area and that Hospital would be closed to patients suffering from any other disease.

The mortuary was used for 21 cases and 11 Post Mortems were held.

SECTION B—continued.

Tuberculosis.

The Tehidy Sanatorium is an excellent institution admirably placed for the treatment of tuberculosis patients in the Tehidy woods, within our area.

The Sanatorium is under the direct care of Dr. E. T. Gaspey. It is under the administrative Control of the County Council through the County Medical Officer, Dr. E. M. Clarke.

Available Beds at the Tehidy Sanatorium :—

					Males.	Females.	Total.
For Pulmonary Cases	.....	.....	.....	.....	48	39	87
For Non-Pulmonary Cases	.....	.....	.....	.....	Variable.		21
Total	.....	.....	.....	.....			108 Beds.

Number of patients admitted from the Camborne-Redruth area during the year:—

			Pulmonary.	Non-Pulmonary.	Total.	
					1937	1936
In residence on Jan. 1st, 1937	Males	.....	7	4	11	—
	Females	.....	4	0	4	—
	Total	.....	11	4	15	—
Admitted during 1937	Males	.....	13	5	18	13
	Females	.....	9	0	9	8
	Total	.....	22	5	27	21
In residence at end of 1937	Males	.....	7	6	13	—
	Females	.....	6	0	6	—
	Total	.....	13	6	19	—

In addition to the above there were admitted to the Sanatorium from the area for observation only :—4 patients,—(1 male and 3 females).

During the year a new ward was opened at the Sanatorium, replacing the old wooden hut. This opportunity was taken to re-arrange the 20 Orthopaedic cases into a separate block.

The new X-ray plant (Watson & Son, Rotalix Tube Plant), was installed for pulmonary work and the old one made into an efficient plant for other cases (orthopaedic).

The possession of so powerful and so efficient a plant as the Rotalix Tube Plant is a great asset. With this plant one is able to produce X-ray negatives of the chest with extraordinary precision of detail and of great brilliance. As a diagnostic instrument the plant is of immense value.

The County Council Tuberculosis Officer (W. F. L. Day, M.B (Cantab.) visits tuberculosis patients residing in the area.

A Public Assistance Institution is situated at Barncoose, Redruth. This Institution serves the Camborne-Redruth Urban District and environs for relief purposes.

The Maternity ward of the Institution serves the whole of the County west of and including Truro.

During the twelve months ending December, 31st, 1937, seventeen maternity cases were dealt with at the Institution.

The average number of inmates maintained there during this period was 112.

On December 31st, 1937, there were 81 cases in the Infirmary and Sick Ward.

SECTION C. Sanitary Circumstances.

(i). WATER.

(a). Quality.

The quality of the water supply throughout the area, on the whole, has been good. Samples that have been taken from the sources below mentioned and analysed were found to be chemically and bacteriologically pure. The detailed records of the analyses are available for reference, if required.

Origin of samples of Water analysed during the year.

Foundry Row, Redruth	Penstruthal.
Heanton Terrace, Redruth	Lanner Green.
Drump Adit, Redruth	Portreath Tank.
Filtrick Four Lanes	Porthreath Tap.
Penventon Four Lanes	Camborne Council Offices.

There have been occasions during the year when the water in Redruth has not been good. At the time of or soon after the flushing of the Redruth mains and more so on flushing the Reservoir at Sandy Lane, the town supply—especially in the low lying parts—becomes muddy. A sample of water taken from a house tap upon such an occasion was found to contain diatoms in large numbers, vorticella, paramoecium and fragments of insects.

Such occasions are not very frequent.

The floor of the reservoir is below the wash out level by approximately 18 inches. The reservoir cannot therefore be easily emptied except by syphonage and pumping.

The bottom of the reservoir thus becomes a rough storage ground filled with slime and decaying vegetable matter and a place where low forms of life (protozoa) may flourish.

When the reservoir is emptied to its base, by pumping and flushing, the accumulated sediment is violently disturbed and muddy water finds its way into the town supply.

The Water of Redruth is not filtered.

The Council have decided that more frequent analysis of the water supply shall be made in future.

Camborne. The water supply by the Camborne Water Company is filtered. The water has been found on analysis to be pure and it is free from deposit.

(b). Quantity.

The sources and distribution of water in the area are fully explained in Appendix III. of the present report.

Camborne. There is no water shortage at any time in that part of the area supplied by the Camborne Water Company. The storage capacity provided by the Company is nearly 40,000,000 gallons. This yields nearly 8,000,000 gallons a week, while the population consumes less than 4,000,000 gallons a week.

The premises served number 5,400, covering an approximate population of 22,000.

Extension. There has been an extension from Barripper to Penponds and a piped supply has been carried to Brea.

Redruth. The main supply for Redruth passes through the Reservoir at Sandy Lane. This Reservoir has a storage capacity of 4,750,000 gallons.

Owing to the temporary diversion of water to Portreath there was a shortage of water in Redruth. This shortage was seriously felt at the West Cornwall Miners' and Women's Hospital, Redruth and at the East Tolgus Isolation Hospital.

SECTION C—continued.

At the Isolation Hospital a reserve tank has now been provided with a capacity of 400 gallons. It is fed from the mains.

There has been a continued shortage of water in the Sparnon Gate area.

As a general rule there is no water shortage in the Redruth area. If the water in the Sandy Lane Reservoir falls below a certain level the supply to the Reservoir is augmented by pumping from a mine shaft in the immediate proximity.

(ii). DRAINAGE AND SEWERAGE.

Part of the area is adequately and well drained by two main drainage systems :—

The Camborne-Main Drainage System and

The Redruth-Illogan Joint Drainage System.

The Pumping plant and the Tunnel at Portreath have worked satisfactorily during the year.

Lanner and St. Day Sewerage Schemes.

The scheme that has been prepared to deal with this matter has not been adopted because sufficient funds are not available to carry it out.

Penponds and Barripper Sewerage Scheme.

This scheme has been carried into effect and the work is completed. Several premises are now already connected with the sewer.

In Redruth there was a short extension of the Main Sewer from Blowing House to the West Park New Housing Estate, a distance of approximately 400 yards.

(iii). RIVERS AND STREAMS.

There are no rivers in the area.

There are many small streams, some originating in waste water from mine pumpings. These streams are generally polluted from the source.

The pollution of the stream at Barripper has ceased with the completion with the Penponds-Barripper sewerage scheme.

(iv). OTHER SANITARY CIRCUMSTANCES.

(a). Closet accommodation.

Public Conveniences. There is great need for additional conveniences in the outlying Districts, particularly at St. Day and Lanner. Additional conveniences are still urgently needed at Portreath, especially at the west end of the beach.

(b). Public cleansing (i.e. refuse collection and disposal, cesspool cleansing, &c.).

These services are under the supervision of the Sanitary Inspectors.

The Motor Refuse Waggon has done good service and the Council would be well advised to provide one of these for each ward.

The Litter Nuisance, Portreath.

From the middle of June to the middle of September a man is employed for a few hours a day to remove litter from the beach.

In the opinion of the Medical Officer this provision is not enough.

We ask the Council not to permit any one to be able truthfully to remark that the Portreath beaches remain a disgrace to the district because of the indifference of those who have the authority to order it otherwise.

SECTION C—continued.

A remedy which presents no difficulty of application is available. In the report of last year we cited the fact that the By Laws of the Cornwall County Council, "prohibit the depositing or leaving in . . . any open space to which the public have access for the time being, tidal or other water in or "abutting on any such place, any . . . refuse or litter."

There is a penalty up to £5 for contravention of these By-laws. The Council for the Preservation of Rural England has drawn attention to this By-law and has made an appeal for its effective enforcement. Notices should be posted giving warning and stating the penalty and an adequate number of receptacles for litter should be provided at many places on the beach.

Refuse Disposal.

Attention has been drawn to the Sorting Depot at College Street, Camborne and the question is being considered whether this depot can be improved or else perhaps removed.

Roskear Depot has been closed and a new depot opened between Dolcoath and Brea.

The present method of refuse disposal in the area is admittedly unsatisfactory. This matter has been referred to at length in the report for 1936.

Trade Refuse.

The Public Health Act 1936 (Section 73), authorises the local authority to undertake the removal of trade refuse from premises within this area and to make reasonable charges for the removal of such refuse.

In consequence of this Act the Council, at their meeting on October 25th, resolved to remove trade refuse at a charge of 2d. per bin per week or 2/- per cart load.

In the case of a combined house and shop one bin per week is removed free and any additional bin charged for.

Trade refuse may be deposited by the traders at Council Depots between the hours of 8 a.m. and 4.30 p.m.

Sanitary Inspection of the Area. (Article 19 of the Sanitary Officers Order, 1926).

Number of Inspections	3248
Number of re-Inspections	656
Preliminary Notices served (Housing or Nuisance).	72
Preliminary Notices complied with	58
Statutory Notices served	3
Statutory Notices complied with	3
Water Closets provided	150
New Drains provided	178
Drains tested and relaid	58
Refuse Receptacles provided	114
Pail Closets provided	2
Pail Closets repaired	17
Disinfections carried out	70
Premises cleansed	4
Bakehouses visited	46
Shops and Stalls inspected	382
Dairies and Cowsheds visited	185
Visits to Isolation Hospitals	223
Visits in connection with Infectious Diseases	124
Letters sent	534
Visits to Public Conveniences	132
Visits to Slaughterhouses	802

SECTION C—continued.

SHOPS. (Shop Acts, 1912, 1913, 1928, 1934).

The Shop Inspector renders a Health Service and the office of Shop Inspector, therefore, is one that naturally belongs to the department of Public Health. It would be more convenient, as it would also be more appropriate, if the Shop Inspector of the area acted under the direction of the Public Health Committee and not, as at present, under the direction of the General Purposes Committee.

The Council is respectfully invited to consider the desirability of making the necessary change.

The number of shops in the Urban Area is 738 including 16 shops at Portreath (764 in 1936).

The number of shop assistants and of young persons employed in shops in the District, during the year, was 1298.

				Males.	Females.	1937 Total.	1936 Total.
Number of Shop Assistants	.....	.....		370	548	918	916
Number of young persons	.....	.....		204	176	380	390
Total	.....	.....	.....	574	724	1298	1306
Number of Inspections	.....	.....	.....			201	
Number of re-Inspections	.....	.....	.....			170	
Number of Night Inspections	.....	.....	.....			11	
Number of Sunday Inspections	.....	.....	.....			4	
Total	.....	.....	.....			386	
Number of cases reported for not exhibiting notices.....							2
Number of cases of Sanitary Defects	.....	.....	.....				7
Number of cases of no seats	.....	.....	.....				4
Number of cases of open after hours	.....	.....	.....				6
Number of cases of Sunday Trading	.....	.....	.....				2
Number of cases of Bad Light and Ventilation							2
Total	.....	.....	.....				23

With one exception all these omissions, defects or illegal acts have been corrected or discontinued.

Seaside Resort and Sunday Trading.

The resort of Portreath is the only place within the Urban area where Sunday Trading is permitted. The Council have made no order under the Sunday Trading Act, 1936.

Trade Exhibitions.

There were two Trade Exhibitions held within the Urban Area during the year.

Early Closing Order.

There is no early closing order operative within the District but the early closing day generally recognised is Thursday.

Smoke Abatement.

One complaint was received during the period under review. The nuisance is now abated.

Swimming Baths and Pools.

There are no public or privately owned swimming baths or pools open to the public in the area.

SECTION C—continued.

Eradication of bed bugs.

Number of houses reported as infested and found to be so :—

(a). Council Houses	0
(b). Other Houses	3

It would not be correct to infer that the District is otherwise wholly free from such infestation.

The method employed in freeing these houses was spraying at intervals with zaldecide followed by fumigation.

SCHOOLS. (Sanitary conditions and water supply).

A list of the schools in the area will be found in the Medical Officers' report for 1934.

The Sanitary condition and the water supply of most, if not of all, the schools is adequate.

Penponds School. This school to which reference is made on page 25 of the 1936 Annual Report can now be provided with satisfactory means of drainage and an adequate water supply as both sewers and water mains have been extended to Penponds and to Barripper.

Troon School. The position remains unsatisfactory.

Carnkie School. The sewer has recently been extended to a position opposite this school with which connection will shortly be made.

SECTION D. Housing.**A. Inspection of Dwelling-houses during the period under review.**

1. (a). Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts	696
(b). Number of inspections made for the purpose	940
2. (a). Number of dwelling-houses included under sub-head (1) above which were inspected and recorded under the housing consolidated regulations, 1925	0
(b). Number of inspections made for the purpose	0
3. Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	0
	1
4. Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	64

B. Remedy of defects without service of formal order.

Number of defective dwelling-houses rendered fit in consequence of informal action by the local authority or their order	64
--------------------------------------------------------------------------------------------------------------------------------	----

C. Action under statutory powers during the year.

(a). Proceedings under sections 17, 18 and 23 of the Housing Act, 1930 :—	
1. Number of dwelling-houses in respect of which notices were served requiring repairs	11
2. Number of houses which were rendered fit, after service of formal notices :	
By owners	11
By local authority in default of owners	0
(b). Proceedings under Public Health Acts :—	
1. Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	50
2. Number of dwelling-houses in which defects were remedied after service of formal notices	
By owners	40
By local authority in default of owners	0
(c). Proceedings under sections 19 and 21 of the Housing Act, 1930 :—	
1. Number of dwelling-houses in respect of which demolition orders were made	8
2. Number of dwelling-houses demolished in pursuance of demolition orders	16
(d). Proceedings under section 20 of the Housing Act, 1930 :—	
1. Number of separate tenements or underground rooms in respect of which Closing Orders were made	0
2. Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	0

SECTION D—continued.

Overcrowding.

(a).	1.	Number of dwellings overcrowded at the end of the year	.....	.....	.....	.....	.....	.....	173
	2.	Number of families therein	.....	.....	.....	.....	.....	.....	173
	3.	Number of persons dwelling therein	.....	.....	.....	.....	.....	.....	963
(b).		Number of new cases of overcrowding reported during the year	.....	.....	.....	.....	.....	.....	1
(c).		Number of cases of overcrowding relieved during the year	.....	.....	.....	.....	.....	.....	5
		Number of persons concerned in such cases	.....	.....	.....	.....	.....	.....	42
(d).		Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	.....	.....	.....	.....	.....	.....	0
(e).		Number of cases of overcrowding in houses owned by the Local Authority and not relieved during the year	.....	.....	.....	.....	.....	.....	3
(f).		Number of cases which have been relieved in the course of slum clearance operations	.....	.....	.....	.....	.....	.....	7

In the Western area of the district at the end of 1937, 80 families had been re-housed, 19 premises demolished and six premises remained unoccupied pending demolition. In the case of 5 houses undertakings were made by the owners that they should not again be used for human habitation, and pending reconstruction, 30 Back-to-back houses likewise.

HOUSING SCHEMES.

Total number of houses in the area erected under Housing Schemes from the inception of Building Schemes until December, 31st, 1937.

1.	In Camborne	.....	.....	.....	.....	.....	258
2.	In Redruth	.....	.....	.....	.....	.....	198
3.	In other parts of the area	.....	.....	.....	.....	.....	0

Total number of houses (under the Housing Schemes) which were under construction at the end of the year or for the erection of which plans were being prepared or were approved.

1.	In Camborne	.....	.....	.....	.....	.....	0
2.	In Redruth	.....	.....	.....	.....	.....	0
3.	In other parts of the area	.....	.....	.....	.....	.....	78

Illogan Ward.

Work in connection with the erection of 78 houses at Killiers Fields was commenced in October and by the end of the year good progress had been made.

St. Day and Lanner Ward.

The Council were still considering sites for the erection of 24 houses in this ward.

Houses to accommodate single persons or aged couples scheduled in the Slum Clearance Scheme (Illogan) are not infrequently required. To meet this need there are in the Illogan Scheme 20 houses of the Bungalow Type, each with one bedroom.

Redruth Housing and Slum Clearance Scheme.

All houses in connection with this scheme have been built and occupied.

All the original houses scheduled for demolition in the scheme have now been demolished.

Of the 82 Back-to-Back houses scheduled for re-construction only six remain to be dealt with.

Overcrowding.

There still are many bad cases of overcrowding in the area, especially among unemployed workers with large families.

A special need exists for the provision of houses for families with 8 to 12 children for whom at present there is no suitable accommodation.

For the more equitable allocation of Council Houses the services of the Medical Officer of Health may sometimes be of value.

Redruth. The number of cases of overcrowding in Council Houses, Redruth, was 8.

SECTION E. Inspection and Supervision of Food.

1. MILK. Milk and Dairies Order, 1926, and the Milk (Special Designations) Order, 1936.

The County Council is the Licensing Authority for Tuberculin tested or Accredited Milk, produced at a Farm, whether bottled upon the Farm or not.

The Urban Council is the Licensing Authority for a bottling establishment (not on a farm) and for other establishments (shops etc.), where Tuberculin Tested or Accredited Milk is sold.

The Urban Council is also the Licensing Authority for pasteurised milk in a pasteurising establishment or in an establishment not covered by the license for a pasteurising establishment.

It is unlawful for any person to use any of these designations (Tuberculin Tested, Accredited or Pasteurised milk), unless he holds a license from the appropriate Licensing Authority authorising him to do so. (Memo 197/Foods. Ministry of Health).

The Milk Special Designation Order 1936, names three grades of milk, which should be generally known.

(a). **Tuberculin Tested Milk.** (Similar to milk previously classified as Grade A). Milk from cows that have passed the tuberculin test for freedom from tuberculosis and has passed certain bacteriological tests.

(b). **Accredited Milk.** Milk from cows which have passed a Veterinary examination. It is bottled on the farm or elsewhere and also has passed the same bacteriological test as under (a) above.

(c). **Pasteurised Milk.** Milk that has been heated to 145° Fahrenheit for 30 minutes to destroy disease germs. It must not contain more than 100,000 bacteria per milli-litre.

Licenses issued by the County Council.

(a). "Tuberculin Tested," License Holders.

There are three in the area.

(b). Accredited Licence Holders.

There are thirteen in the area.

Milk from these License Holders has been examined regularly by the County Council. By courtesy of the County Medical Officer the results have been communicated to the Medical Officer of the Urban Council. On the whole these have been good, but not invariably so.

Licenses issued by the Urban District Council.

Pasteurised Milk. The Camborne Co-operative Society is licensed to retail "Pasteurised" Milk in the Camborne-Redruth Urban District.

The Pasteurised Milk is produced at the Co-operative Wholesale Society Ltd., Creamery, at Penryn.

The Milk and Dairies Order 1926 provides for the registration of all persons carrying on the trade of cowkeeper or dairyman. Provision is also made therein for the registration of all dairies.

All farms from which milk is supplied on or for sale, are "dairies."

The responsibility for the administration of this order rests entirely with the Sanitary Authority (e.g. with the Urban District Council).

There are in the area approximately 400 milk producers and approximately 2,800 cows.

Since the amalgamation of areas and of parts of areas into the Urban District of Camborne-Redruth the old Registers of Cow-keepers which in whole or part were taken over in 1934, have not been completely revised.

The Register is now being revised and brought up to date.

Approximately 300 cowsheds were visited by the Sanitary Inspectors during the year.

SECTION E—continued.

2. MEAT AND OTHER FOODS.

Such inspections as it was possible for them to make in the limited time at their disposal our Sanitary Inspectors have made. A relatively small percentage only of the total carcasses has been inspected. (This matter was dealt with at length in a previous report).

Carcases Inspected and Condemned.

	Cattle excluding cows.	Cows	Calves	Sheep & Lambs	Pigs
Number Killed	Unknown	Unknown	Unknown	Unknown	above 28000
Number Inspected	438	—	715	234	6744
All Diseases except Tuberculosis.					
Whole carcasses condemned	—	—	1	—	7
Carcasses of which some part or organ was condemned	1	—	—	—	4
Percentage of the number inspected affected with disease other than Tuberculosis	0.55	—	—	—	2.06
Tuberculosis only.					
Whole carcasses condemned	1	2	6	—	—
Carcasses of which some part or organ was condemned	—	—	—	—	650
Percentage of the number inspected affected with Tuberculosis	0.55	0.77	0.83	—	10.4*

* This figure is relatively low because it was not possible for our inspectors to examine all the carcasses, a more correct figure is obtained from the following sources.

The Cornish Meat and Provisions Co., reports 13,373 pigs slaughtered with 17% affected with Tuberculosis.

The West of England Bacon Co., reports 20,488 pigs slaughtered with 17.5% affected with Tuberculosis.

Public Abattoir.

In our area of approximately 22,000 acres a large portion of which is relatively densely populated, about 50,000 animals are slaughtered for food every year. This work should be centralised.

There is need for a Public Abattoir in the area.

No Meat Marketing Scheme under Part III of the Public Health (Meat) Regulations 1924, is in force in the area.

Anthrax Order, 1928.

Two cases of suspected anthrax were reported to the Police in the area during the year. In none of the cases did the Veterinary Inspector of the Local Authority suspect anthrax and, the diagnosis not being confirmed, the Form A. was withdrawn.

Adulteration.

The administration of the various Acts and Regulations dealing with food and drugs and their adulteration is carried out by the County Council.

Chemical and Bacteriological Examination of food.

This, with the exception of milk and water, is a duty belonging to the County Council.

Nutrition. No special steps have been taken for the dissemination of information concerning this subject.

Bakehouses. There are seventeen bakehouses registered in the District. They were all inspected and found to be satisfactory.

SECTION F. Prevalence of, and control over, Infectious and other Deases.

Diphtheria antitoxin, anti-meningo-coccal-serum and anti-tetanic serum are provided by the Council for immediate use in appropriate cases.

Prontosil and Sulphanilamide have been extensively used in the area in cases of streptococcal infections, with satisfying results.

There has been no unusual prevalence of any notifiable infectious disease in the area during the year.

No action has been taken in the area to produce artificial immunization against Diphtheria in Hospitals or other Institutions.

Supplies of T.A.F. are available for use by doctors on application to the M.O.H., such supplies being provided free by the Council.

Notifiable Diseases (other than Tuberculosis), during 1937.					Total Notified	Admitted to Hospital	Died
Small Pox	.....	.....	.....	.....	0	0	0
Scarlet Fever	.....	.....	.....	.....	40	10	1
Diphtheria	.....	.....	.....	.....	1	1	0
Typhoid and Para-Typhoid	.....	.....	.....	.....	1	1	0
Puerperal Fever	.....	.....	.....	.....	3	1	1
Puerperal Pyrexia	.....	.....	.....	.....	7	5	0
Pneumonia	.....	.....	.....	.....	47	0	11
Encephalitis	.....	.....	.....	.....	0	0	0
Malaria	.....	.....	.....	.....	0	0	0
Erysipelas	.....	.....	.....	.....	7	0	0
Ophthalmia Neonatorum	.....	.....	.....	.....	4	0	0

Age Groups of Notified Cases.

Age Periods	Scarlet Fever.	Diphtheria.	Typhoid Para-typhoid.	Puerperal Pyrexia. Puerperal Fever	Pneumonia	Encephalitis	Malaria	Erysipelas.	Ophthalmia Neonatorum	Total.
Under 1 year	0	0	0	0	5	0	0	0	4	9
1—2 years	1	0	0	0	3	0	0	0	0	4
2—3 years	3	0	0	0	5	0	0	0	0	8
3—4 years	1	0	0	0	5	0	0	0	0	6
4—5 years	5	0	0	0	2	0	0	0	0	7
5—10 years	19	0	0	0	6	0	0	0	0	25
10—15 years	1	0	0	0	1	0	0	0	0	2
15—20 years	2	0	0	0	2	0	0	0	0	4
20—35 years	5	1	1	7	4	0	0	0	0	18
35—45 years	3	0	0	3	1	0	0	1	0	8
45—65 years	0	0	0	0	8	0	0	5	0	13
65 and over	0	0	0	0	5	0	0	1	0	6
Total	40	1	1	10	47	0	0	7	4	110

SECTION F—continued.

Tuberculosis.

No action has been taken under the Public Health (prevention of Tuberculosis) Regulations 1925 which relates to persons suffering from Tuberculosis employed in the milk trade.

No action has been taken under section 62 of the Public Health Act 1925, by which power is given to the Council to apply to a court of summary jurisdiction for an order for the removal to a hospital or institution of any person who is suffering from pulmonary tuberculosis and is in an infectious state.

New Cases and Mortality (Tuberculosis), during 1937.

Age Periods.	NEW CASES				DEATHS			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
0 years and over	0	0	0	0	0	0	1	0
1 year and over	0	0	2	0	0	0	1	1
5 years and over	3	1	5	1	0	0	0	0
15 „ „	5	4	5	0	2	5	0	0
25 „ „	4	5	0	0	4	2	1	0
35 „ „	2	0	0	0	4	3	0	0
45 „ „	3	1	0	0	5	0	0	0
55 „ „	1	0	0	0	4	0	0	0
65 „ „	0	0	0	0	1	1	0	0
Total	18	11	12	1	20	11	3	1

Number of cases of tuberculosis remaining on the Register of Notification as residing in the area on December 31st, 1937.

			Males.	Females.	Total 1937	Total 1936	Total 1935
Pulmonary	.....	.....	202	113	315	248	240
Non-Pulmonary	.....	.....	76	59	135	113	111
Total	.....	.....	278	172	450	361	351

Ratio of non-notified tuberculosis deaths to total tuberculosis deaths.

Of the 35 deaths from Tuberculosis recorded 16 cases had not been notified.

Omission to notify has doubtless been accidental and not purposeful.

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APPENDIX I.

Rainfall in the Camborne-Redruth District in 1937.

Observations made at Redruth. (by A. Pearce Jenkin, Esq., F.R.Met.Soc.).

Lat. 50° 14ft. N. Long. 5° 14ft. W. Altitude 398ft.

Month.	Total Rainfall.	Highest Daily Fall.	No. of Wet days. over 0.04 ins.	No. of Dry days.
January	8.52 ins.	1.03 ins.	26	5
February	7.67	1.42	22	6
March	6.17	1.27	17	14
April	3.94	.98	16	14
May	2.39	.73	10	21
June	2.09	.43	10	20
July	1.87	.67	9	22
August	1.19	.92	4	27
September	3.71	.62	13	17
October	3.69	0.98	9	22
November	3.54	1.12	11	19
December	4.57	1.07	14	17
Total Rainfall for year				49.32 ins.
Mean Monthly Fall				4.11 ins.
Greatest Fall in one day			February 2nd.	1.42 ins.
Number of Dry Days				204
Number of Wet Days				161
Wettest Month				January.
Driest Month				August.

Observations made at Trevince Gwennap. (by C. H. Beauchamp Esq.). for the year 1937.

Altitude 240ft. Lat. 50° 30ft. N. Long. 5° 10ft. W.

Month.	Total Rainfall.	Highest Daily Fall	No. of Wet days.	No. of Dry days.
January	8.03 ins.	.96 ins.	27	4
February	8.06	1.30	25	3
March	6.40	1.20	24	7
April	3.95	.87	17	13
May	2.25	.76	12	19
June	1.79	.44	11	19
July	1.53	.47	17	14
August	1.07	.79	7	24
September	4.71	.70	19	11
October	4.11	.94	10	21
November	3.36	1.20	12	18
December	4.99	1.17	20	11
Total Rainfall for year				50.20 ins.
Mean Monthly Fall				4.18 ins.
Greatest Fall in one day			February 2nd.	1.30 ins.
Number of Dry Days				164
Number of Wet Days				201
Wettest Month				January.
Driest Month				August.

APPENDIX II.

FACTORIES, WORKSHOPS AND WORKPLACES.

1.—Inspection of Factories, Workshops and Workplaces.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS
OR INSPECTORS OF NUISANCES.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Occupiers Prosecuted. (4)
Factories (Including Factory Laundries)	48	—	—
Workshops (Including Workshop Laundries)	29	—	—
Workplaces (Other than Outworkers' Premises)	13	—	—
TOTAL ...	90	—	—

2.—Defects found in Factories, Workshops and Workplaces.

Particulars.	Number of defects.			Number of offences in respect of which Pro-secutions were instituted.
	Found.	Remedied.	Referred to H.M. Inspector.	
(1)	(2)	(3)	(4)	(5)
<i>*Nuisances under the Public Health Acts :</i>				
Want of cleanliness	2	2	—	—
Want of ventilation	1	1	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances				
Sanitary accommodation {insufficient	3	3	—	—
{unsuitable or defective	2	2	—	—
{not separate for sexes	1	1	—	—
<i>Offences under the Factory and Workshop Acts :</i>				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Other offences	—	—	—	—
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)				
TOTAL ...	10	10	—	—

*Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

APPENDIX III.

General Review of the Sources and Distribution of the Water Supply of the Area.

Under the Public Health Act 1875 Section 51-70, any Urban Authority may provide the whole or part of their district with a supply of water proper and sufficient for public and private purposes, and may :—

- i. Construct and maintain waterworks, dig wells and do anything else necessary : and
- ii. Lease or hire, or with the sanction of the L.G.B. purchase, waterworks (within or without their district), and any powers and privileges of a water company ; and
- iii. Contract for the supply of Water. (Section 51).

The Local Authority must keep a supply of pure and wholesome water in any waterworks constructed or purchased by them, and the water may be constantly laid on at such pressure as will carry it to the top storey of the highest dwelling within the district or part of it. (Section 55).

All existing public pumps, cisterns, wells etc., used for the gratuitous supply of water vest in and are under the control of the Local Authority who may maintain and supply them with pure, wholesome water. (Section 64).

If we assume that the daily water requirements per head in the district is 35 gallons (a high estimate)* then provision has to be made for a daily supply to the population of the area of 1,225,000 gallons. This requirement appears to be met in the area.

The Camborne-Redruth Urban District Council makes provision for the supply of water in their area by :—

- (a). Contracting with the Camborne-Water Company for the supply of water by that Company to a given area.
- (b). Providing a system of water storage and distribution in the Redruth area with the Reservoir at Sandy Lane Redruth.
- (c). The maintenance and supervision of certain wells and chutes within the area.

A. THE CAMBORNE WATER COMPANY.

This Company was incorporated by special Act of Parliament known as “ **The Camborne Water Act** ” of 1867. Subsequently further powers were obtained by :—

the **Camborne Water Order 1890.**

the **Camborne Water Act 1908.**

the **Camborne Water Act 1933.**

The statutory powers of the Company cover the Parishes of Camborne, Crowan and Illogan.

The original source of supply was at Cargenwyn, in the Parish of Crowan and, in 1908, a further supply was obtained at Boswyn, and in 1935 a supply from adits** at Penponds.

The Storage Comprises :—

Nos. 1, 2 and 3 Reservoirs at Cargenwyn	.....	.....	.....	.....	.....	Capacity	32,000,000
Boswyn	.....	.....	.....	.....	.....		6,000,000
Service Reservoir at Trevu, Camborne	.....	.....	.....	.....	.....		1,000,000
Total	.....	.....	.....	.....	.....		<u>39,000,000</u>

* 35 gallons per head in 24 hours is the average supply in the London Districts.

** An adit properly so called is a horizontal shaft or opening into a mine from the side of a hill.

APPENDIX III.—continued.

The resources of the Company, including the new supply at Penponds (unfiltered) give an average daily yield of 1,285,000 gallons whereas the daily consumption is 600,000 gallons.

The Camborne Water Company supplies water to Camborne and the surroundings by gravitation augmented by pumping when necessary.

There are two zones of supply, a high level zone which is entirely pumped from the gravitation zone or lower zone.

i. **The Low Level Zone.**

Water is collected from springs into a **Reservoir at Cargenwen**, (550 ft. O.D.* See letter H. on accompanying map), and from a mine adit to **Boswyn Reservoir**, (580 ft. O.D.), see letter J. on map.

From these heads water passes down by gravitation to the **Trevu Service Reservoir**, (480 ft. O.D.), see letter K. and is distributed throughout the area coloured burnt sienna upon the map. This is the Low Level Zone.

ii. **The High Level Zone** is coloured neutral tint upon the map. Water for this Zone is pumped from the burnt sienna area (lower Zone) from a point marked M upon the map to the high level tank marked N.

The Trevu Service Reservoir (K) receives an auxiliary supply by pumping from a mine shaft at Penponds (L), 176 ft. O.D.

B. THE REDRUTH SYSTEM (including Portreath).

The sources of this supply lie within the Urban District of Camborne-Redruth. The water is conveyed chiefly by gravitation.

There are four zones of supply :—

- i.* High Zone. Filtrick Zone. (Green on the map).
- ii.* Medium Zone, The Reservoir Zone. (Pink).
- iii.* Low Zone. The Fore Street Tank Zone. (Blue).
- iv.* The Portreath Zone. (Brown).

The general supply is augmented, when required, by pumping from the Sandy Lane Mine Shaft, situated at the Sandy Lane Reservoir.

(a). **The High Zone or Filtrick Zone** (Green).

Water is collected from the **Filtric Adit** (see letter A on map), 620 ft. O.D. and **Penventon Adit** (letter B), 670 ft. O.D., and conveyed by pipe line direct to the **Sandy Lane Reservoir** (letter C), 560 ft. O.D.

By means of a specially constructed Balance Valve the water in this pipe line is kept under high pressure enabling supplies to be taken off before it reaches the Reservoir.

The water thus drawn off between the source and the Reservoir supplies the Filtric Zone, part of Redruth, Mount Ambrose, and Radnor (Green area).

* O.D. means Ordnance Datum

(b). **The Medium Zone or Reservoir Zone** (Pink).

The Reservoir zone is supplied by the Reservoir (C), which itself is fed from :

The Filtrick Zone (Filtric and Penventon)

Penstruthal Adit, (D) (580 ft. O.D.)

Gordon Adit, (E) (564 ft. O.D.)

The Reservoir receives an addition supply, as required, by pumping from the mine shaft (320 ft. O.D.) immediately adjoining the Reservoir at C.

(c). **Low Zone, Fore Street Tank Zone** (Blue).

The Fore Street Tank (F) 412 ft. O.D. is fed from the Reservoir (C). The flow into this tank is controlled by a ball valve.

The Fore Street Tank Zone, coloured blue on the map, is supplied from the Reservoir (C) via the Fore Street Tank (F).

(d). **The Portreath Zone**, coloured brown on the map, is fed from a spring at Nancekuke (G) 167 ft. O.D., augmented, when necessary, from the Fore Street Tank, Redruth (F).

C. WELLS, CHUTES AND PUMPS.

A large number of wells, chutes and pumps is distributed throughout the area. All these publicly owned are marked upon the map in numerals on a yellow base surrounded with a blue circle. In addition to these there are many stand taps publicly owned and many privately owned wells. The sites of these stand taps and privately owned wells are not indicated upon the map.

Water from the public wells, chutes and pumps has not yet been analysed. These supplies will now be examined and the results of the examination commented upon in next year's report.

APPENDIX III.—continued.

List of Public Wells and Springs in the Area.

(The reference number will be found to correspond with the ring figures upon the map).

Ref. No.	Well, Pump, Chute or Spring.	Known As.
1.	Spring with Stand Tap.	Nancekuke Chute
2.	Spring	Mawla Well
3.	Well and Pump	Cambrose Well
4.	Well and Pump	Bridge Well.
5.	Two Wells and Pumps	Parsonage Wells
6.	Spring	Watergate Chute
7.	Adit Mouth	Shallow Adit
8.	Spring	Treskerby Chute
9.	Well and Pump	Halgoss Well.
10.	Adit Mouth	Vogue Chute
11.	Well and Pump	Roscroggan Pump
12.	Spring	Tolskithy Chute
13.	Adit Mouth	Five Chutes
14.	Spring	Menadarva
15.	Spring	Little Reskadinnick
16.	Spring	Carn Marth Chute
17.	Well and Pump	Carharrack Pump
18.	Well and Pump	Oak Well
19.	Well and Pump	Carn Brea Well
20.	Spring	Church Coombe Chute
21.	Spring	Trevarth Chute
22.	Well and Pump	Pennance Well
23.	Well and Pump	Brea Pump
24.	Well and Pump	Bosleake Well
25.	Spring with Stand Tap	Carnkie Supply
26.	Spring	Tiddy's Chute
27.	Spring	Roseworthy
28.	Well and Pump	Pengegon Pump
29.	Spring	Carn Entral
30.	Well and Pump	Betty Adit
31.	Well and Windlass	Fourlanes Well
32.	Well and Windlass	Fourlanes Well
33.	Two Chutes	Penponds Chutes
34.	Spring and Chute	Knave-go-by Chute
35.	Well and Pump	Bolenowe Moor
36.	Adit Mouth and Stand Tap	Treskillard Tap
37.	Well and Windlass	Fourlanes Well
38.	Spring	Penhalurick Chute
39.	Well and Pump	Barripper Pump
40.	Adit Mouth Chute	Troon Adit
41.	Spring	Bolenowe
42.	Spring and Chute	Stennack
43.	Well and Pump	Chycarne Moor Pump
44.	Well and Pump	Croft Michael
45.	Well and Pump	Sea View Farm, Croft Michael
46.	Spring and Stand Taps	Lanner Supply



THE CAMBORNE-REDRUTH PUBLIC WATER SUPPLY

(INCLUDING PUMPS AND WELLS)

